

A collage of 15 images representing various industries and sectors. The images include: a modern bus, a person working on a wall, a city skyline, a construction vehicle, a bridge, the Telework logo, a train, a cyclist, a landscape, a large dam, a family walking, a stylized green logo, a desert landscape, a person on a horse, and a car.

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MAG LONG RANGE TRANSPORTATION PLAN 2002 UPDATE

EXECUTIVE SUMMARY

The Maricopa Association of Governments (MAG) Long Range Transportation Plan (LRTP) addresses all modes of transportation in the region. This Plan is usually updated each year and is based on a 20 year time horizon. In this 2002 Update, the time horizon of the Plan is extended from 2021 to 2022. This document summarizes the current status of the Plan and highlights any changes made since approval of the 2001 Plan Update. Major changes to the LRTP are being deferred pending the preparation of a new Regional Transportation Plan (RTP).

The development of the new RTP was initiated in December 2000 and will take approximately two years to complete. This effort will employ a comprehensive planning process, provide for extensive public involvement, and include an evaluation of the transportation needs and impacts of alternative regional growth scenarios. The new RTP will also identify policies and strategies to guide transportation investments and establish a long-range framework for multi-modal, transportation facilities and services in the region. The new RTP will include a 20-year, revenue-constrained LRTP element.

OUTLOOK

Over the life of this Plan, resident population in Maricopa County is projected to increase almost 50 percent, while regional travel is projected to increase approximately 58 percent. In response to this growth, the MAG LRTP calls for a considerable expansion of regional transportation facilities. Some of the planned expansions to roadways and transit services include:

- ▶ a 50 percent increase in freeway/expressway lane-miles,
- ▶ approximately a 45 percent increase in street lane miles,
- ▶ a tripling of local bus services,
- ▶ a quadrupling of express and commuter bus service, and
- ▶ a 39-mile light rail transit system.

Even with these expansions to the regional transportation system, congestion levels are projected to increase. However, average traffic speeds are projected to remain about the same, because population growth occurs primarily in outlying areas that currently experience little congestion and planned freeways will be completed throughout the region. Without the planned improvements (No-Build), peak hour speeds are projected to decline and congestion levels per mile of travel are projected to double.

FINANCE

The Transportation Equity Act for the 21st Century requires the MAG LRTP to include a balanced funding plan. The MAG funding plan is based on a trend funding concept, that is, current transportation revenue sources are assumed to continue in the future with periodic adjustments for growth and inflation as needed.

Funding assumptions are actually variations of historic sources needed to maintain a trend level of commitment to meet ongoing regional transportation needs in this high growth area. For example, it is assumed that local contributions to transit and street construction will continue in the future. Private contributions to street construction are also projected to continue. Federal funding is projected to continue, but at a declining rate in constant dollar terms. At the State level, it is assumed that there will be periodic adjustments in the gasoline tax rate (or equivalent funding) to keep pace with inflation. MAG LRTP freeway funding relies on a fair share of these funds being allocated by ADOT to the MAG region.

This 2002 Update of the MAG LRTP recognizes the end of the one-half cent sales tax for freeways in 2005. The LRTP identifies the continuation of significant funding for all transportation modes, which can be obtained from various revenue sources such as extension of transportation sales taxes and/or additional gas taxes or user fees. In the LRTP, the proceeds from sources such as an extension of transportation sales taxes, or amounts raised from other taxes, are used to address a variety of transportation purposes with the primary focus on freeways, transit, and streets. It is assumed that significant local funding from cities with light rail transit facilities will be available from sources such as local transportation sales taxes. The specific mix and allocation of future revenue sources for transportation will depend on future decisions by elected officials and the public.

FREEWAYS/EXPRESSWAYS

The 2002 Update of the LRTP is limited to relatively minor changes for the Freeway/Expressway Plan. Completion dates for new freeways are updated and text describing planned improvements has been refined to reflect current project status. A map of the Regional Highway System is shown in Figure EX-1.

New Freeways. In 1985 voters approved a half-cent sales tax to fund new freeways and expressways in the region. Since 1985, the miles of new freeways in the region have more than doubled and 108 miles remain to be completed. The major portion of these facilities will be completed by the year 2007, compared to an earlier target year of 2014. This acceleration will be largely accomplished with additional financing. In this 2002 Update, a half-diamond interchange on the Agua Fria at Bethany Home Road, which will be funded by the City of Glendale, has been added to the Plan.

Existing Freeways. The MAG High Occupancy Vehicle (HOV) Plan provides overall direction for improvements to existing freeways. The highest MAG priorities for Arizona

Department of Transportation (ADOT) discretionary funds in the region are completion of HOV lanes on the Black Canyon, Superstition and Squaw Peak, respectively. HOV lanes on the Black Canyon are now completed, HOV lanes and general purpose lanes on the Superstition are under construction and HOV lanes on the Squaw Peak have been programmed. The Long Range Transportation Plan also includes additional widening of the Black Canyon and the Superstition, as well as collector/distributor roads between Baseline Road and 16th Street.

Regional Access Routes. Regional access routes into and out of the region are also part of the LRTP. To the northeast, State Route (SR) 87 has been widened to four lanes. To the northwest, construction is underway between Loop 303 and SR 74 to complete U.S. 60 as a four-lane facility. Further widening of I-10, I-17 and S.R. 85 are part of the LRTP.

TRANSIT

The Regional Transit Plan is to triple local bus service, triple dial-a-ride service, quadruple express bus service and complete a 39 mile light rail transit system. Funding needed to support this plan is being actively pursued at the local, regional, state and federal level. In addition, studies are ongoing to assess options for possible future commuter rail service in the region.

Fixed Route Bus Service. Fixed route bus service generally follows the mile grid street system of the Phoenix metropolitan area. The regional transit plan calls for nearly a tripling of revenue miles of service, with enhanced frequencies in areas having existing service and new service in areas currently unserved. Evening hours are extended and Sunday service is added.

Para-transit Service. Since 1992, the regional plan has supported tripling paratransit service. This plan remains intact with service doubling by 2012 and tripling by 2022.

Express/Commuter Bus Service. This Update quadruples the number of miles of express bus service (Figure EX-2). The planned express service is focused on meeting peak-period demand. Express bus service extends to outlying communities such as Carefree and Cave Creek. Commuter bus service would provide peak period service on weekdays to the communities of Buckeye, Gila Bend and Wickenburg. The system also includes park-and-ride lots and on-line stations which incorporate express bus, local bus, light rail, and shuttle services.

Bus Rapid Transit (BRT). The first BRT routes are programmed to be implemented in 2003 within the City of Phoenix. Where available, BRT service will utilize existing and planned HOV lanes and stop on a limited basis to provide rapid connections for commuters from north, east, west and south Phoenix to the Phoenix Central Business District. BRT service is currently planned for the City of Phoenix only. However, the MAG High Capacity Transit Plan is addressing the need for BRT and other forms of high capacity transit in other areas of the region.

Shuttles/Circulators. Shuttles and neighborhood circulators are used to meet local circulation needs for the light rail system and express bus network, especially in central activity areas.

Light Rail Transit. The light rail transit (LRT) plan includes a 39-mile system (Figure EX-3). Elements of the LRT include provisions for park-and-ride lots and signal prioritization to improve speeds. Shuttle buses and an improved fixed route network also play an important role in the LRT system.

STREETS

Major arterial streets are generally located on the mile grid and carry most of the traffic in the region. The MAG Plan calls for approximately a 45 percent increase in major street lane mileage over the next 20 years. This includes new lanes located on the edge of the metropolitan area, as well as streets in built-up areas that are being widened. There are no additional links in the long-range street network since last year's update, beyond those reflected in the draft MAG FY 2003-07 TIP. The 2002 Update extends the funding plan and the planning horizon to 2022.

AIRPORTS

An update of the MAG Regional Airport System Plan (RASP) was adopted by the MAG Regional Council in December, 1993. An Implementation Study, designed to facilitate carrying out the MAG RASP recommendations, was completed and approved by the MAG Regional Council in December, 1996 and a new plan update is underway. The latest projections indicate that air passenger demand at Sky Harbor will nearly double over the next 20 years, while general aviation demand is projected to increase 77 percent.

The MAG RASP includes 17 airports. Sky Harbor is the commercial service airport and Luke Air Force Base is a major military base. Reliever airports include Chandler, Glendale, Mesa - Falcon Field, Phoenix - Deer Valley and Phoenix - Goodyear. Williams Gateway Airport has been converted from a military base to a civilian airport serving commercial carrying cargo and general aviation. The 1993 MAG RASP recommended a new runway at Phoenix Goodyear Airport, a third parallel runway at Phoenix Sky Harbor (which was implemented in 2000), conversion of Williams Gateway Airport to commercial service, runway extensions at several airports, and studies of potential sites for new general aviation airports. A second runway was deleted from the Glendale Airport Master Plan in 1998.

BICYCLES

The MAG Bicycle Plan was approved in 1992. Elements of the plan were updated in 1998 to better address emerging issues and needs in bicycling. This plan identifies a planned regional bikeway system which emphasizes on-street facilities. An off-street system plan

has also been completed. The Bicycle Plan includes a bicycle policy statement consisting of four overall goals and numerous objectives. The goals and objectives are designed to provide guidance in planning, designing and implementing a system of internal and regionally connected bikeways that serve the daily travel needs of bicyclists.

The Regional Off-Street System (ROSS) Plan was approved in 2001. The ROSS Plan identifies a region-wide system of off-street paths/trails for non-motorized transportation. Throughout the MAG region, numerous opportunities for off-street travel by people who walk and bicycle exist along areas such as canal banks, utility line easements and flood control channels. The goal of the ROSS plan is to help make bicycling and walking viable options for daily travel trips using off-street opportunities. The ROSS Plan identifies issues associated with paths/trails and non-motorized transportation, identifies corridors which could be used for paths/trails in the MAG region, and provides design guidelines for paths/trails.

The MAG West Valley Multi-Modal Transportation Corridor Plan and accompanying action plan were adopted by the Regional Council on October 3, 2001. This plan is one component of a much larger project: the West Valley Recreation Corridor. The West Valley Recreation Corridor Project is two separate, recently completed projects: the MAG Plan and the Flood Control District of Maricopa County Agua Fria Watercourse Master Plan. Working with funds provided through the ADOT Transportation Enhancement Funds Program, the MAG Plan creates a master plan and action plan to implement a 42-mile trail network for pedestrians, equestrians, bicyclists and other non-motorized trail users for the New River and lower Agua Fria River.

PEDESTRIAN

On December 8, 1998, the MAG Regional Council updated the pedestrian plan that was developed in 1993. This revised plan -- *Pedestrian Plan 2000* -- identifies and recommends programs and actions to guide and encourage the development of pedestrian areas and facilities and ultimately to encourage increased walking as a viable mode in the region. It also incorporates a unique approach: flexible design tools (Roadside Performance Guidelines) to assist MAG member agencies in creating better walking environments. The plan revision was overseen by the MAG Pedestrian Working Group with direct input provided by a stakeholders group.

DEMAND AND SYSTEM MANAGEMENT

Transportation Demand Management (TDM) programs and Transportation System Management (TSM) strategies are included as integral parts of the MAG LRTP with specific projects designated for funding in the MAG five-year program. Ongoing TDM efforts include telecommuting, rideshare, and vanpool programs. Ongoing TSM efforts include projects that are making operational improvements through real-time traffic management during congested periods, and infrastructure-based capacity improvements. Capacity improvements include improvements to intersections and interchanges.

Operational TSM improvements are being made through Intelligent Transportation Systems (ITS) projects that include advanced traffic management systems, telecommunication links that enable cross jurisdictional coordination, frequent and accurate traveler information and advisories via radio, television and the internet, and smoother interfaces at arterial/freeway crossings. ITS projects are becoming increasingly important in regional transportation planning efforts. The MAG ITS Committee has completed an update of the region's ITS Strategic Plan. This plan will serve well into the future as the region's road map for the investments in ITS infrastructure that consist of advanced systems and effective management strategies.

HUMAN SERVICES

The transportation needs of special populations is a regional concern. Limitations caused by age or disability complicate securing transportation for a portion of our population. In addition, those who are seeking employment or training and those who have few financial resources find limited transportation options available to reach second shift and weekend employment.

The Long Range Transportation Plan includes federal, state and local funds to provide for transportation services. Among the services provided are:

- Work Links program which seeks to match low-income persons with available transportation resources;
- Wheels-To-Work program that promotes a tax credit for donated cars to be used by cash assistance recipients;
- Elderly and Persons with Disabilities Transportation Program which provides capital assistance funds (van purchases) to non-profit organizations and local jurisdictions who serve the elderly and persons with disabilities;
- The development of an elderly mobility project to address the transportation challenges facing the senior population;
- Local programs such as reduced bus fares, Dial-A-Ride, van and car pools, donated bicycles and various other programs.

SAFETY

The Safety Planning Program at MAG (launched in 2001), supported by the Regional Safety Stakeholders Group, will lead to explicit safety considerations within the planning process. The primary goal of the Safety Planning Program is the identification of regional transportation safety issues and concerns, and addressing them through the planning process. There is room for safety improvement in the areas of intersections, pedestrian facilities, bicycle facilities and school zones.

Ensuring high levels of safety on the regional transportation system is a primary goal of the region. In addition to safety planning, MAG has launched two projects that are producing immediate benefits by saving lives and injuries on the freeway system. Significant contributions towards safety are being made by the Freeway Service Patrol Program that helped nearly 7000 motorists in the first year. MAG regional council approved freeway median barriers are preventing median cross-over crashes installation. Crash history figures for the region indicate that between 1994 and 1999 total crashes have increased by 24 percent, while fatal or injury crashes have increased by 9 percent.

Figure EX-1: Regional Highway System

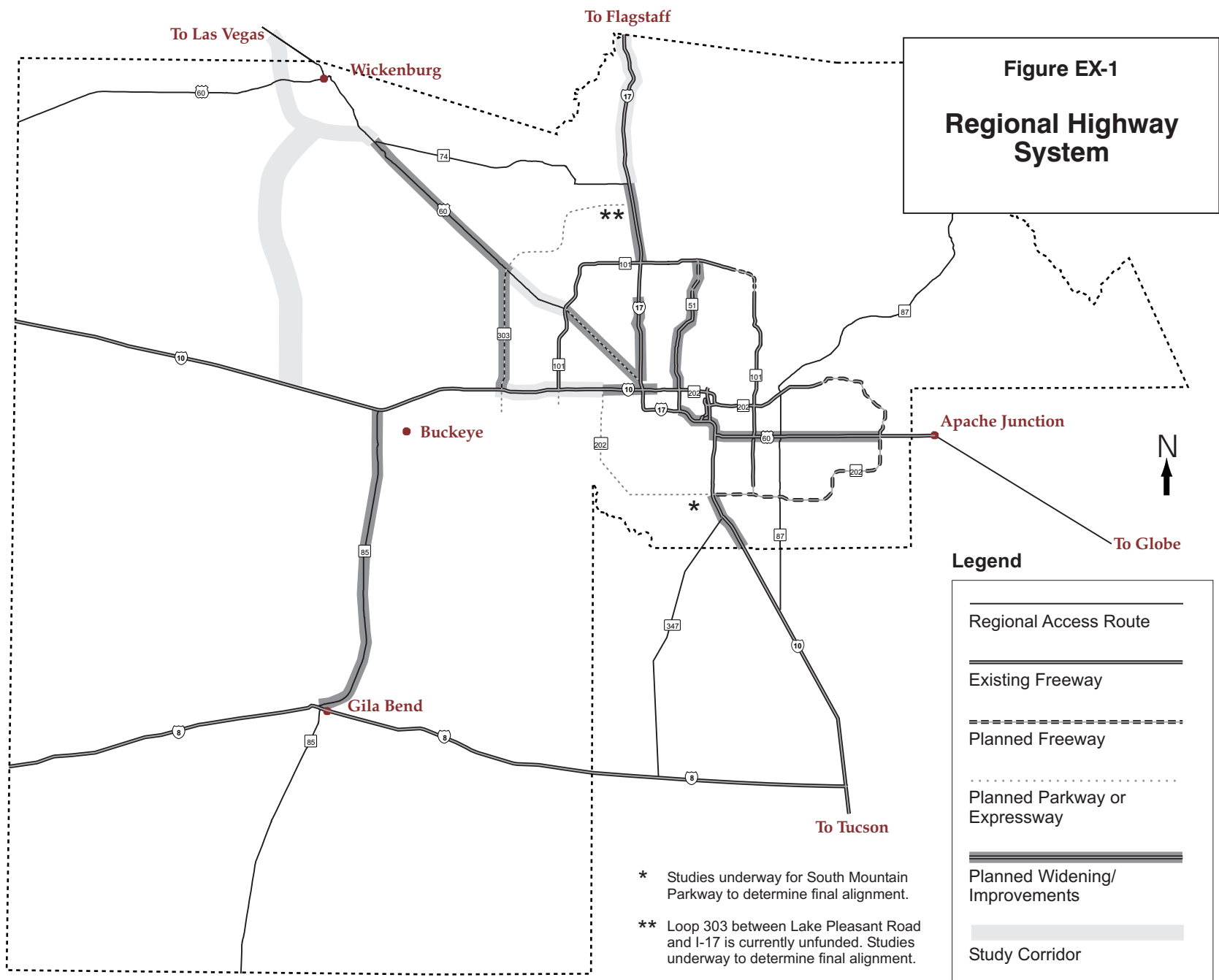


Figure EX-2: Express Bus and Bus Rapid Transit Plan

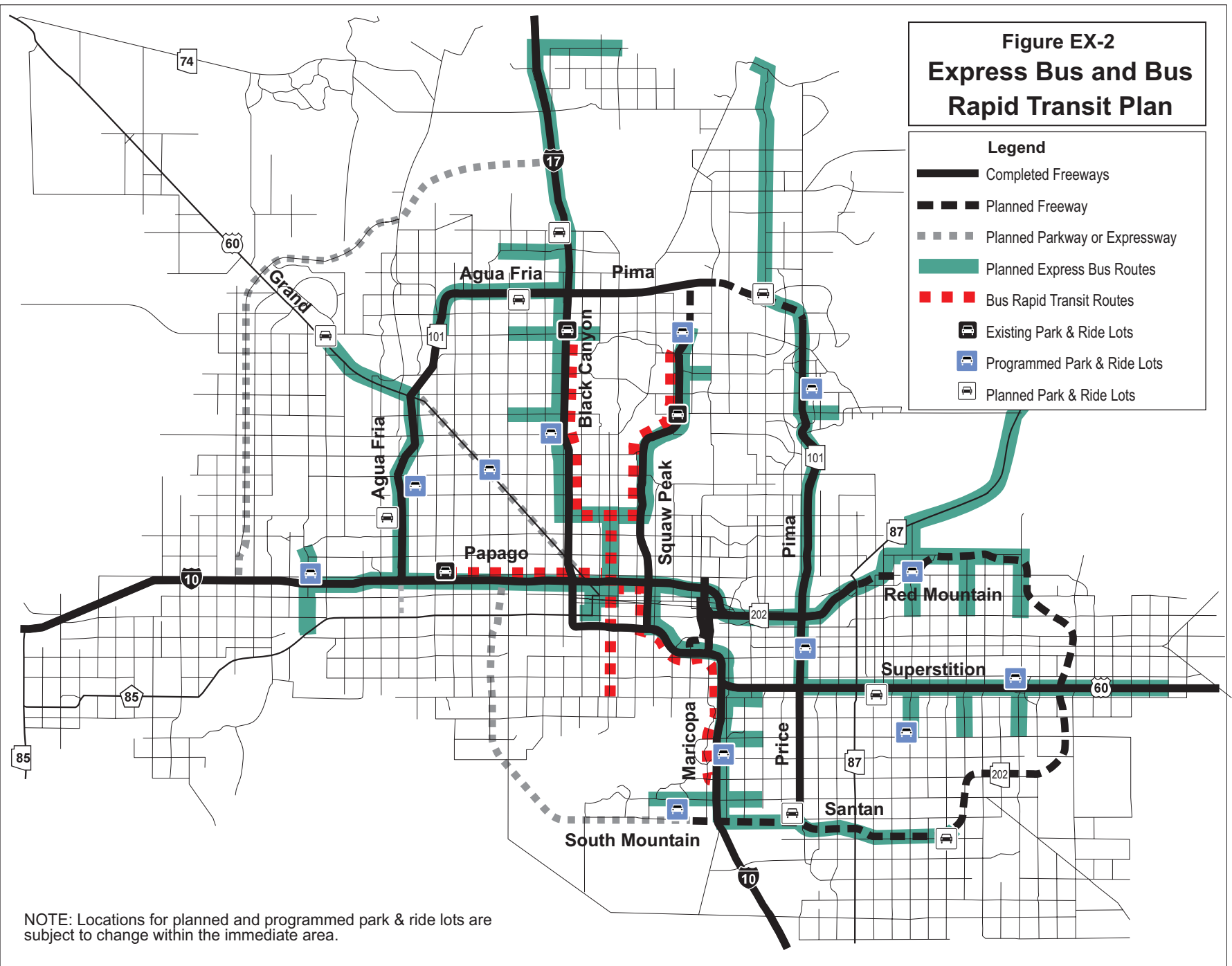


Figure EX-3: Light Rail Service

